

ABSTRACT

A valve apparatus that has a longitudinal axis therethrough comprises a valve seat member, a valve closure member, a fluid flow path, and a screening member. The valve seat member comprises a hollow bore and a first frustoconical contact surface. The valve closure member comprises a body and a second frustoconical contact surface that is adapted to seal against the first frustoconical contact surface. The valve closure member is movable along the longitudinal axis of the valve apparatus. The fluid flow path extends through the bore of the valve seat member and between the valve seat member and the valve closure member. This fluid flow path is closed when the second frustoconical contact surface is sealed against the first frustoconical contact surface. The screening member is attached to at least one of the valve closure member or the valve seat member, and screens particles from fluid passing through the fluid flow path when the valve closure member approaches the valve seat member.